

REMARKS

Claims 1-3 are all of the pending claims, with claims 1 and 3 being written in independent form. By this Amendment, claim 1 is amended. No new matter is added.

Claims 1-3 stand rejected under 35 USC § 103(a) as being obvious over UA 6,238,277 to Duncan et al. ("Duncan") in view of US 4,369,543 to Chen et al. ("Chen"). Applicant respectfully traverses this rejection in view of the following remarks.

To establish a *prima facie* case of obviousness, three basic criteria be met. First, there must be some motivation or suggestion, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references must teach or suggest all of the claimed limitations.

Applicant asserts that none of the above criteria have been met and therefore a *prima facie* case of obviousness has not been established. For example, there is no motivation or suggestion to modify the primary reference of Duncan with the teachings of Chen, or to combine the reference teachings.

Duncan relates to a multi-disk floor grinder that has particular utility for use on grinding concrete floors (column 1, lines 5-8). Duncan seeks to address known problems with large floor grinding machines that are operated from the standing position that employ a large single grinding disk which is expensive and may cause a danger to the operator in the event such a large disk shatters.

In contrast, Chen relates to a remote controlled radio vacuum cleaner for dust cleaning operations without an external power line connection (column 1, lines 6-9). Chen seeks to address problems with conventional vacuum cleaners that require an external power supply and plugs into wall sockets installed in buildings. These wall sockets are often spaced apart such that a long power cord or an extension line is required for cleaning spacious areas. Thus, Chen provides a vacuum cleaner with radio transmitting and receiving devices for automatic dust cleaning operations that does not have and external power connection (column 1, lines 11-34).

As Duncan provides a gasoline powered motor 20 to power the multiple grinders 78, 80, 82, Duncan does not have a power cord and does not require an external power source from an outlet or a wall socket. As such, there would be no motivation to modify the concrete grinding

device of Duncan with the battery powered remote control radio vacuum cleaner described in Chen because Duncan does not require an outlet or an extension cord to operate.

Further, there is no suggestion for combining the references as proposed in the Office Action. The teaching or suggestion to make the combination, and the reasonable expectation of success, must both be found in the prior art and not based on the Applicant's disclosure (MPEP § 2143). In making an assessment of the differences between the prior art and the claimed subject matter, 35 USC § 103 specifically requires consideration of the claimed invention "as a whole." The "as a whole" instruction in § 103 prevents evaluation of the invention on a part-by-part basis. Without this important requirement, an obviousness assessment might break an invention into its component parts, then find a prior art reference corresponding to each component. This line of reasoning would import hindsight into the obviousness determination by using the invention as a roadmap to find its prior art components (Ruiz v. A.B. Chance., Co., F.3d 1270, 1275, (Fed. Cir. 2004)).

By combining the teachings of Chen, which do not relate to a concrete grinding machine or address the problems being resolved in Duncan, the Office Action fails to consider the Chen reference as a whole and merely seeks to find a reference that may provide the component that is admitted as being deficient in Duncan (e.g., two drive motors mechanically connected to two wheels and a control unit influencing the direction of rotation and the rotation speed of the two drive motors, the control unit being operatively connected via a radio communication unit to an operating device, designed when manual actuation for remote control of the machine).

"Decomposing an invention into its constituent elements, finding each element in the prior art, and then claiming that it is easy to reassemble these elements into the invention, is a forbidden ex-post analysis." (In re Mahurker, 831 Fed. Supp. 1801, 28 USPQ 2nd 1801).

Because neither the invention, nor the prior art, is being considered as a whole, but rather is being broken down in its constituent elements in an effort to present all features of the claimed device, the combination of Chen is improper as it merely puts hindsight in the line of reasoning and fails to provide proper motivation or suggestion to make the combination.

In the Examiner's Response to Arguments in the outstanding Office Action, the Examiner alleges that the Duncan and Chen references are from the same field of endeavor and therefore are sufficiently related to support combining the references in rejecting the pending claims.

In determining whether particular references are within the appropriate scope of art, the Federal Circuit has adopted a two step test (In re Deminski, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986)). First, it must be determined whether the reference is within the field of the inventor's endeavor, and second, assuming the reference is outside that field, it must be determined whether the references are "reasonably pertinent" to the particular problem with which the inventor was involved. The court pointed out that a reference cannot be considered to be within the inventor's field of endeavor merely because both relate to the same industry.

In this case, the inventor's field of endeavor is that of floor grinding machines used for grinding floor surfaces, such as concrete. In contrast, the field of endeavor of the Chen reference is battery operated vacuum cleaners for dust cleaning operations without external power line connections. Thus, the reference is not within the field of the inventor's endeavor.

Second, the court indicated that a reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to the inventor's attention in considering his problem (In re Clay, 966 F.2d 656, 23 USPQ 2nd 1058 (Fed Cir. 1992)).

As Chen addresses problems completely unrelated with the problems being addressed in the present application, Chen cannot be said to be "reasonably pertinent" to the inventor's problem. Specifically, as stated above, Chen seeks to overcome problems caused by the spacing of wall sockets and long power cords necessary for vacuum cleaners, such as the power cords becoming tangled or pulling out of the wall socket (column 1, lines 18-21). Thus, the problems of Chen have nothing whatsoever to do with the problems being addressed in the present Application, i.e. grinding floor surfaces at a rate which is normally only a fraction normal walking pace, thereby causing a person controlling the machine to be uncomfortable and tired (page 2, lines 5-12 of the specification of the present application).

Accordingly, Chen cannot be considered to reasonably relate to the inventor's endeavor. Therefore, there is no motivation to combine the references as proposed in the Office Action.

Additionally, there would be no expectation of success in the combination of Duncan and Chen without undue experimentation. For example, Chen teaches two DC drive motors connected to two wheels, respectively, in a remote controlled device used for operating and controlling the movement of the vacuum cleaner. In contrast, the grinding machine in Duncan has no drive wheels. Further, due to the size and weight of the gasoline powered concrete

grinding machine, such battery powered DC motors as taught by Chen would likely fail to control the movement and direction of the multi-disk concrete floor grinding machine even if additional experimentation were performed to include drive wheels in the Duncan device. Moreover, additional experimentation would be required to properly determine if the size and power requirements of DC motors when trying to drive the floor grinding machine. Thus, simply using a radio control device as taught in Chen will not by itself lead to a successful modification of the Duncan device.

Even considering *arguendo* that there was motivation to make such a combination and there would have been some expectation of success, the combination of references fails to teach or suggest all of the claimed features. For example, the combination of Duncan and Chen, whether considered alone or in combination, fails to disclose or suggest a mobile machine for grinding floor surfaces comprising...a control unit influencing the direction of rotation and the rotational speed of the two drive motors.

Chen merely discloses a remote control device that has power switch 23 for turning the remote control on and off, a remote control switch 28 for generating control signals, a left operating lever 1 and a right operating lever 2. The two operating levers have forward, reverse and stop positions (col. 2, lines 11-25; Fig. 1 of Chen). Thus, there is no disclosure or suggestion in Chen of a control unit that influences the rotational speed of the two DC drive motors 16, 17.

Because the combination of references fails to disclose or suggest each and every feature inside the rejected claims, withdrawal of the rejection is respectfully requested.

CONCLUSION

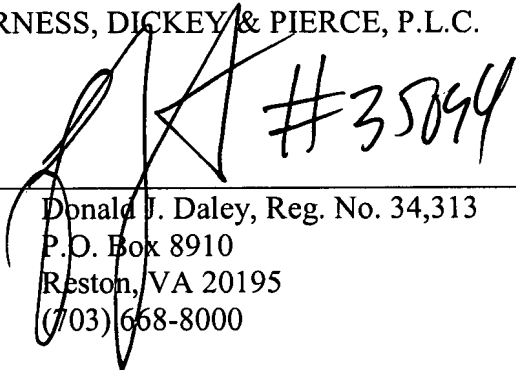
Applicant earnestly solicits reconsideration and allowance of all of the pending claims.

The Commissioner is authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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By



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